

ABSTRACT OF THE DISCLOSURE

A semiconductor device and method of fabricating the device. An emitter region is formed self centered and self aligned symmetrically with a base region. Using frontside processing techniques, a collector is formed symmetrically self-aligned with the base region and the emitter region. The collector region may be further formed self-centered with the base region using backside processing techniques. The self-aligned and self-centered symmetric structure virtually eliminates parasitic elements in the device significantly improving the device performance. The device is scalable on the order of approximately 0.1 microns. The method also provides reproducibility and repeatability of device characteristics necessary for commercial manufacture of the symmetric device.